U.S. DEPARTMENT OF COMMERCE NATIONAL INSTITUTE OF STANDARDS AND TECHNOLOGY OFFICE OF STANDARDS SERVICES

COMMERCIAL STANDARD CS246-62

STEEL CHAIN LINK GALVANIZED FENCE FABRIC

Commercial Standard CS246-62, Steel Chain Link Galvanized Fence Fabric, was withdrawn January 17, 1978 by the U.S. Department Commerce.

* * * * * * * * *

ASTM A392, Standard Specification for Zinc-Coated Steel Chain-Link Fence Fabric, was used to replace CS246-62.

The ASTM Committee Staff Manager (F14 on Fences) can provide guidance for additional assistance and information on standards and/or sources for other committees.

Contact: Committee F14 Staff Manager

American Society for Testing and Materials (ASTM)

10 Barr Harbor Drive

West Conshohocken, Pennsylvania 19428-2959

Telephone: (610) 832-9728; Fax: (610) 832-9666

Inquiries/Orders: (610) 832-9585; Fax: (610) 832-9555

federal register



[3510-13]

National Bureau of Standards
STEEL CHAIN LINK GALVANIZED
FENCE FABRIC

Commercial Standard Action on Proposed Withdrawal

In accordance with section 10.12 of the Department's "Procedures for the Development of Voluntary Product Standards" (15 CFR Part 10), notice is hereby given of the withdrawal of Commercial Standard CS 246-62, "Steel Chain Link Galvanized Fence Fabric."

This withdrawal action is being taken for the reason that CS 246-62 is adequately covered by the American Society for Testing and Materials' standard ASTM A392-74, "Zinc-Coated Steel Chain-Link Fence Fabric," and duplication is inappropriate and not in the public interest. This action is taken in furtherance of the Department's announced intentions as set forth in the public notice appearing in the Federal Register of September 30, 1977 (42 FR 52465) to withdraw this standard.

The effective date for the withdrawal of this standard will be January 17, 1977. This withdrawal action terminates the authority to refer to this standard as a voluntary standard developed under the Department of Commerce procedures.

Dated: November 14, 1977.

ERNEST AMBLER,
Acting Director.

[TR Doc.77-33306 Filed 11-17-77;8:45 am]

- 1978

mared 17

REPRINTED FROM:

FEDERAL REGISTER, VOL. 42, NO. 223-FRIDAY, NOVEMBER 18, 1

File Copy Do Not Kemore Standard January 17, 1918

COMMERCIAL STANDARD CS246-62

Steel Chain Link Galvanized Fence Fabric

A recorded voluntary standard of the trade published by the U.S. Department of Commerce



For sale by the Superintendent of Documents U.S. Government Printing Office, Washington 25, D.C. - Price 10 cents

U.S. DEPARTMENT OF COMMERCE

OFFICE OF TECHNICAL SERVICES

Commodity Standards Division

With the cooperation of the National Bureau of Standards

EFFECTIVE DATE

Having been passed through the regular procedures of the Commodity Standards Division, and approved by the acceptors hereinafter listed, this Commercial Standard is issued by the U.S. Department of Commerce, effective October 1, 1962.

LUTHER H. HODGES, Secretary.

COMMERCIAL STANDARDS

Commercial Standards are developed by manufacturers, distributors, and users in cooperation with the Commodity Standards Division of the Office of Technical Services and with the National Bureau of Standards. Their purpose is to establish quality criteria, standard methods of test, rating, certification, and labeling of manufactured commodities, and to provide uniform bases for fair competition.

The adoption and use of a Commercial Standard is voluntary. However, when reference to a Commercial Standard is made in contracts, labels, invoices, or advertising literature, the provisions of the standard are enforcible through usual legal channels as a part of the sales contract.

Commercial Standards originate with the proponent industry. The sponsors may be manufacturers, distributors, or users of the specific product. One of these three elements of industry submits to the Commodity Standards Division the necessary data to be used as the basis for developing a standard of practice. The division by means of assembled conferences or letter referenda, or both, assists the sponsor group in arriving at a tentative standard of practice and thereafter refers it to the other elements of the same industry for approval or for constructive criticism that will be helpful in making any necessary adjustments. The regular procedure of the division assures continuous servicing of each Commercial Standard through review and revision whenever, in the opinion of the industry, changing conditions warrant such action.

SIMPLIFIED PRACTICE RECOMMENDATIONS

Under a similar procedure the Commodity Standards Division cooperates with industries in the establishment of Simplified Practice Recommendations. Their purpose is to eliminate avoidable waste through the establishment of standards of practice for sizes, dimensions, varieties, or other characteristics of specific products; to simplify packaging practices; and to establish simplified methods of performing specific tasks.

The initial printing of CS 246-62 was made possible through the cooperation of the Chain Link Fence Manufacturers Institute.

Steel Chain Link Galvanized Fence Fabric (Effective October 1, 1962)

1. PURPOSE

1.1 The purpose of this Commercial Standard is to provide a nationally recognized standard of quality for steel chain link galvanized fence fabric, and to promote fair marketing practices and a better understanding between manufacturers, distributors and users of such fabrics. It will also assist ultimate users in determining the sizes of mesh and heights of fence fabric that are standard within the industry.

2. SCOPE

This standard gives the nomenclature, definitions, and general requirements for commercial standard steel chain link galvanized fence fabric, designed and woven primarily for installation on the premises of any dwelling, building, or structure as a boundary line or for the protection of property. A recommended form for declaring compliance with this standard is included.

3. **DEFINITIONS**

3.1 Chain link fence fabric.—Chain link fence fabric is a fencing material made from wire helically wound and interwoven in such a manner as to provide a continuous mesh without knots or ties except in the form of knuckling or of twisting and barbing the ends of the wires to form the selvage of the fabric.

3.2 Knuckling.—Knuckling is the term used to describe the type of selvage obtained by interlocking adjacent pairs of wire ends and bending the wire ends back into a closed loop.

Twisting and barbing.—Twisting and barbing is the term used to describe the type of selvage obtained by twisting adjacent pairs of wire ends together in a close helix of 11/2 machine turns which is equivalent to three full twists and cutting the wire ends at a sharp angle to provide sharp points. The wire ends beyond the twist are a minimum of 1/4 inch long.

REQUIREMENTS

4.1 Materials.

4.1.1 Base Metal.—The base metal of the fabric shall be a good commercial quality of steel wire of the gages specified in Table I. No. 6 gage wire shall have a minimum tensile strength of 80,000 psi before zinc-coating and 70,000 psi after zinc-coating (see 4.1.2). Gage No's. 9, 11, and 13 wires shall have a minimum tensile strength of 90,000 psi before zinc-coating and 80,000 psi after zinc-coating. The tensile strength of the wire shall be determined in accordance with the requirements of 5.5.1.

Zinc-coating.—The fabric shall be zinc-coated by the hot-dip 4.1.2process after fabrication, or shall be fabricated from wire zinc-coated by the electrolytic or hot-dip process. The weight of zinc-coating shall

be not less than 1.2 ounces per square foot of actual surface covered when tested in accordance with 5.5.2. The zinc used for the coating shall conform to the grades specified in ASTM Designation B6-58 1, Standard Specifications for Slab Zinc (Spelter).

4.2 Fabric sizes.—The height, size of mesh, and wire diameters of chain link fabric shall be as given in Table I. The methods of measurement and tolerances are given in 4.2.1, 4.2.2 and 4.2.3 respectively.

Table I.—Fabric sizes

Height of fence fabric (inches)	Size of mesh	Gage, coated wire ¹	Nominal diameter of coated wire
36, 42, 48, 60, 72, 84, 96, 108, 120, 144	Inches 2 2 2 2 134 1	Number 6 9 11 11 13	Inch 0. 1920 . 1483 . 1205 . 1205 . 0915

¹ Steel wire gage.

4.2.1 Height of fabric.—The height of the fabric shall be the overall dimension from ends of barbs or knuckles. The tolerance on the

nominal height shall be plus or minus one inch.

4.2.2 Mesh sizes.—The size of mesh shall be determined by measuring the minimum clear distance between the wires forming the parallel sides of the mesh, measured in either direction. The tolerance in the size of 13/4 and 2 inch mesh shall be plus or minus 1/8 inch; for 1 inch mesh, plus or minus 1/16 inch.

4.2.3 Wire diameter.—The diameter of the coated wire shall be determined as the average of two readings measured to the nearest 0.001 inch taken at right angles to each other on the straight portion of the parallel sides of the mesh. The tolerance in the diameter of

the coated wire shall be plus or minus 0.005 inch.

Selvage.—Fabric 48 inches high and under in 2 inch mesh shall be furnished with knuckling at one selvage and twisting and barbing at the other. Fabric 60 inches high and over in 2 inch mesh shall be furnished with twisting and barbing on both selvages. All 13/4 and 1 inch mesh fabric shall be furnished with knuckling at both selvages. Special selvages may be specified by the purchaser.

4.4 Roll length.—Unless otherwise specified, the standard length of roll shall be 50 linear feet, plus or minus 1 percent. The length of roll shall be determined by measuring a roll of fabric which has been unrolled on a flat surface and hand-stretched to remove all slack.

Workmanship.—The chain link fence fabric shall be made of high-grade materials and with good workmanship. The zinc-coating shall be applied in a continuous process and shall not be applied to the fabric in roll form. Excessive roughness, blisters, sal ammoniac spots, bruises and flaking shall be noted. These and other obvious defects, if present to any considerable extent, shall provide a basis for rejection.

¹ Copies of ASTM publications are obtainable from the American Society for Testing and Materials, 1916 Race Street, Philadelphia 3, Pa.

INSPECTION AND TESTING

5.1 General.—The tests given herein are intended primarily for use as production tests in conjunction with manufacturing processes, inspection methods and with other tests if needed, according to 5.2, so as to insure the conformity of the chain link fabric with the requirements of this standard.

5.2 Production inspection and testing.—During the process of manufacture, the manufacturer shall make such inspections and tests as are needed to maintain the quality of the product so as to be consistently in conformity with this standard. The inspection and tests given herein (see 5.3 and 5.5) shall be made regularly during production for all chain link fabric furnished as being in conformity with this standard.

5.3 Inspection.—The chain link fabric shall be visually inspected to determine its conformance with the workmanship, design, and

dimensional requirements of this standard.

5.4 Sampling.—One roll from every 50 rolls or fraction thereof shall be selected at random for test purposes, but in no case shall less than three rolls be selected from a shipment. The specimens for test purposes shall consist of individual pieces of wire taken from the outside end of the sample rolls.

 $Test\ procedures.$

5.5.1 Tensile Strength.—The tensile strength of the fabric shall be determined in accordance with the method described in ASTM Designation E8-57T, Tension Testing of Metallic Materials, using one specimen from each sample roll. Specimens to establish conformance to this requirement shall constitute individual pickets from a section of the fence fabric of a sufficient length so as to measure 15-18 inches after straightening. The straightened portion of the specimen shall be inside the jaws of the tensile testing machine so that the actual test is performed on the undeformed section between the jaws. If fracture does not take place between the grips, the test shall be discarded if it does not meet the tensile requirement.

Weight and zinc coating.—The weight of zinc coating on the fabric shall be determined in accordance with the method described in ASTM Designation A90-53, Weight of Coating on Zinc-Coated (Galvanized) Iron and Steel Articles, using one specimen from each sample roll. The specimens tested may be of any length over 12 inches

but preferably should be about 24 inches long.

Noncompliance.—If any specimen tested fails to meet the requirements specified, two additional specimens shall be taken from the sample roll and tested, both of which shall meet the requirements in every respect, otherwise the material represented by that sample roll shall be considered as not being in compliance with this standard.

6. PACKAGING

The chain link fabric shall be furnished in compact rolls, the outer ends of which shall be firmly tied or securely interlocked with the preceding layer to prevent loosening during shipment and in handling.

7. LABELING

The height and length of fabric, mesh size, and wire gage, shall be shown on a label or tag securely attached to each roll.

IDENTIFICATION

8.1 Labels and Literature.—In order that purchasers may be assured that the chain link fabric actually complies with all requirements of the commercial standard, it is recommended that manufacturers include the following statement in conjunction with their name and address on labels, invoices, sales literature, etc.:

This chain link fabric complies with Commercial Standard CS246-62, as developed by the trade under the procedure of the Commodity Standards Division, and issued by the U.S. Department of Commerce.

8.1.1 The following abbreviated statement is suggested when available space on labels is insufficient for the full statement:

Complies with CS246-62, as developed by the trade and issued by the U.S. Department of Commerce.

HISTORY OF PROJECT

In a letter dated April 25, 1961, the Chain Link Fence Manufacturers Institute requested the cooperation of the Commodity Standards Division in the establishment of a Commercial Standard for Steel Chain Link Galvanized Fence Fabric, and submitted as a basis for the standard a tentative standard developed by that organization.

The Commodity Standards Division circulated copies of the proposed Commercial Standard to representative producers, testing laboratories, users and Government agencies for constructive comment. All comments and suggestions received were carefully considered and adjustments were made to the proposal to satisfy the comment wherever practicable. The recommended Commercial Standard, TS-5581, was circulated to the trade on May 17, 1962, for acceptance.

On August 16, 1962, the Commodity Standards Division announced that acceptances had been received representing a satisfactory majority of the industry and the Commercial Standard, to be designated CS246-62 would be considered effective beginning October 1, 1962.

Project Manager: D. R. Stevenson, Commodity Standards Division, Office of Technical Services. Technical Adviser: Dr. L. V. Judson, Office of Weights and Measures, National Bureau of Standards.

STANDING COMMITTEE

The following individuals comprise the membership of the standing committee, which is to review, prior to circulation for acceptance, revisions proposed to keep the standard abreast of progress. Comment concerning the standard and suggestions for revision may be addressed to any member of the committee or to the Commodity Standards Division, Office of Technical Services, U.S. Department of Commerce which acts as secretary for the committee.

Robert R. Brannan, Anchor Post Products, Inc., 6500 Eastern Avenue, Baltimore 24, Md. (Chairman) S. M. Broski, Jr., Broski Bros., Inc., 3915 Fuller, Kansas City, Mo.

L. B. Alley, Continental Steel Corporation, Kokomo, Ind.

Robt. S. Gaddis, J. E. Sirrine Co., P.O. Box 5456, Station B, Greenville, S.C. John Heimans, Jr., San Jose Steel Co., Inc., 195 North 30th St., San Jose,

ACCEPTORS

The manufacturers, distributors, users and others listed below have individually indicated in writing their acceptance of this Commercial Standard prior to its publication. The acceptances indicate an intention to utilize the standard as far as practicable but reserve the right to depart from it as may be deemed desirable. The list is published to show the extent of recorded public support for the standard, and should not be construed as indicating that all products made by the acceptors actually comply with its requirements.

Products that meet all requirements of the standard may be identified as such by a certificate, grademark or label. Purchasers are encouraged to require such specific representation of compliance, which may be given by the manufacturer whether or not he is an acceptor.

ASSOCIATIONS

(General Support)

American Institute of Architects, Washington, D.C.

Rail Steel Bar Association, Chicago, Ill.

FIRMS AND OTHER INTERESTS

Alamo Iron Works, San Antonio, Tex. Aluminum Fence Company of America, Youngstown, Ohio American Fence Co., Salt Lake City, Utah American Fence Construction Co., Baltimore, American Hoist & Derrick Co., St. Paul, Minn.
American Steel and Wire Div., U.S. Steel Corp., Cleveland, Ohio Anchor Post Products, Inc., Baltimore, Md. Anchor Post Products, Inc. of California, Whittier, Calif.
Anchor Post Products, Inc. of Florida, Miami, Fla.
Anchor Post Products, Inc. of Texas, Houston, Tex.
Atlantic Steel Co., Warehouse Div., Atlanta, Ga.

Beatle Steel & Supply Co., Inc., Oakland, Calif.
Bell Fence Manufacturers, Beaumont, Tex.
Bickford, Robt. T., Architect, Elmira, N.Y.
Borrmann Steel Co., Burbank, Calif.
Broski Bros., Inc., Kansas City, Mo.
Bryant Machine Co., Inc., Westfield, Mass.
Buhrman-Pharr Hardware Co., Texarkana,

Ark. Building Material Products Distributors, Inc., Philadelphia, Pa.

California Hardware Co., Los Angeles, Calif. Campbell Steel Co., Inc., Corpus Christi,

Campbell Steel Co., Inc., Corpus Christi,
Tex.
Century Fence Co., Waukesha, Wis.
City of Amarillo, Tex., Purchasing Dept.,
Amarillo, Tex.
City of Baltimore, Md., Bureau of Purchases,
Baltimore, Md.
City of Charlotte, N.C., Charlotte, N.C.
City of East Providence, R.I., East Providence, R.I.
City of Eric, Pa., Purchasing Agent, Eric,
Pa. (General Support).
City of Evanston, Ill., Purchasing Agent,
Evanston, Ill.
City of Fairbanks, Alaska, Fairbanks, Alaska
City of Gainesville, Fla., Purchasing Agent,
Gainesville, Fla.
City of Hollywood, Fla., Engineering Dept.,
Hollywood, Fla.,
City of Jackson, Mich., Purchasing Agent,
Jackson, Mich.

City of Kalamazoo, Mich., Purchasing Agent, Kalamazoo, Mich., City of Long Beach, Calif., Purchasing Agent, Long Beach, Calif., Purchasing Agent, Long Beach, Calif. Purchasing Agent, Newport News, Va., Purchasing Agent, Newport News, Va.
City of Oak Ridge, Tenn., Purchasing Officer, Oak Ridge, Tenn., Purchasing Officer, Oak Ridge, Tenn.
City of Philadelphia, Pa., Procurement Dept., Philadelphia, Pa., Procurement Dept., Philadelphia, Pa., City of Richmond, Va., General Services Dept., Richmond, Va., General Services Dept., Richmond, Va.
City of Winston-Salem, N.C., Purchasing Agent, Winston-Salem, N.C., Coeur D'Alenes Co., The, Wallace, Idaho Colorado Fuel and Iron Corp., The Pasalogic Colorado Evel and Iron Corp., The Pasalogic Colorado Evel and Iron Corp., The Pasalogic

Colo.
Colorado Fuel and Iron Corp., The Realock
Fence Dept., Buffalo, N.Y.
Commonwealth of Puerto Rico, Dept. of the
Treasury, San Juan, P.R.
Consolidated Supply Co., Inc., Picher, Okla.
County of Allegheny, Director of Purchases,
Pittsburgh, Pa.,
County of St. Louis, Purchasing Agent,
Clayton, Mo.

Danser Hardware & Supply Co., Weston, W. Va. Davis, K. H., Wire and Cable Corp., Los An-geles, Calif.

Ellison Publications, Inc., dba FENCE IN-DUSTRY Trade News, Chicago, Ill. (General Support).

Fritz, D. T., & Sons, Inc., Glen Burnie, Md. General Playground and Fence Co., St. Louis,

Mo.
Gibraltar Fence Co., Inc., Houston, Tex.
Gransden-Hall & Co., Flint, Mich.
Gruman, J., Steel Co., Minneapolis, Minn.
Gund Fence & Equipment, Inc., Chicago,

Hackney Manufacturing Corp., Birmingham, Ala:
Halco Manufacturing Co., Dallas, Tex.
Hall Supply Co., Grand Rapids, Mich.
Harris Steel Fence Co.. Los Angeles, Calif.
Hohulin Brothers, Goodfield, Ill.
Howard Supply Co., Los Angeles, Calif.

Ideal Fence Supply Co., Hicksville, L.I., N.Y. Interlocking Fence Co., Morton, Ill.

Jensen Byrd Co., Spokane, Wash. Jones & Laughlin Steel Corp., 3 Gateway Center, Pittsburgh, Pa. (General Support).

Kaiser Fence Co., Bladensburg, Md. Kansas City Wire & Iron Works, Kansas City, Mo.

Lee Hardware Co., The, Salina, Kans. Lewis Supply Co., Inc., Memphis, Tenn.

Maricopa County Purchasing Dept., Phoenix, Ariz. Miller, C. H., Hardware Co., Huntingdon, Mitchell-Powers Hardware Co., Bristol, Va.

National Fence Manufacturing Co., Inc., Bladensburg, Md. Nichols Wire & Aluminum Co., Davenport, Iowa (General Support). North Carolina Division of Purchase & Con-tract, Raleigh, N.C.

Pacific Fence and Wire Co., Portland, Oreg. (General Support).
Pacific Fence Co., Los Angeles, Calif.
Patzig Testing Laboratories, Des Moines, Perry Mill Supply Co., Erie, Pa.
Phillips Hardware Co., The, Cambridge, Md.
Pidgeon-Thomas Iron Co., Memphis, Tenn. Port City Steel Co., Savannah, Ga.

Reeves Fences, Inc., Tampa, Fla. Roanoke Hardware Co., Roanoke, Va. Robertson Fence Co., Mt. Sterling, Ohio Robertson Steel & Iron Co., The, Cincinnati,

San Jose Steel Co., Inc., San Jose, Calif. Sears, Roebuck & Co., 925 S. Homan Ave., Chicago, Ill. Smith Fence Co., Inc., Buffalo, N.Y. Smith, The W. H., Hardware Co., Parkersburg, W. Va. Southeastern Steel Co., Charleston, S.C. Spicola Hardware Co., Tampa, Fla. Spiegel, Inc., Chicago, Ill. Standard Supply and Hardware Co., Inc., New Orleans, La. State of Alaska, Dept. of Administration, Juneau, Alaska
Stewart Iron Works Co., Inc., The, Covington, Ky.

Town of Greenfield, Greenfield, Mass.

Western Fence Co., Phoenix, Ariz.

U.S. GOVERNMENT

General Services Administration, Washington, D.C.
Health, Education and Welfare, Dept. of,
Washington, D.C.
Interior, Dept. of, Washington, D.C.
Public Housing Administration, Washington,

(Cut on this line)

ACCEPTANCE OF COMMERCIAL STANDARD CS 246-62 STEEL CHAIN LINK GALVANIZED FENCE FABRIC

If acceptance has not previously been filed, this **sheet** properly filled in, signed, and returned will provide for the recording of your **organization** as an acceptor of this Commercial Standard.

		Date	
Commodity Standards Office of Technical Se U. S. Department of C Washington 25, D. C.	rvices		
Gentlemen: We believe that this ard of practice, and we in the	Commercial St individually plan	andard con stitute to utili ze i t as fa	es a useful stand- ar as practicable
production ¹ of this commodity.	distribution ¹	purchase ¹	testing ¹
We reserve the right	t to depart from t	he standard as we	e deem advisable.
We understand, of coply with the standard if forming thereto.	ourse, that only t	hose articles whi	ich actually com
Signature of authorized	officer		
		(In ink)	
	-		
(Kindly	typewrite or print t	he following lines)	
Name and title of above	officer		
Organization			
Street address	(Fill in exactly	y as it should be liste	ed)
City, zone, and State			- 1
Underscore the applicable word panies and affiliates which should associations, trade papers, etc., should be added after the signature	ls. Please see that separ be listed separately as desiring to record the	ate acceptances are filed acceptors. In the case of air general support, the	I for all subsidiary com- of related interest, trade words "General support"

TO THE ACCEPTOR

The following statements answer the usual questions arising in connection with the acceptance and its significance:

- 1. Enforcement.—Commercial Standards are commodity specifications voluntarily established by mutual consent of those concerned. They present a common basis of understanding between the producer, distributor, and consumer and should not be confused with any plan of governmental regulation or control. The United States Department of Commerce has no regulatory power in the enforcement of their provisions, but since they represent the will of the interested groups as a whole, their provisions through usage soon become established as trade customs, and are made effective through incorporation into sales contracts by means of labels, invoices, and the like.
- 2. The acceptor's responsibility.—The purpose of Commercial Standards is to establish, for specific commodities, nationally recognized grades or consumer criteria, and the benefits therefrom will be measurable in direct proportion to their general recognition and actual use. Instances will occur when it may be necessary to deviate from the standard and the signing of an acceptance does not preclude such departures; however, such signature indicates an intention to follow the standard, where practicable, in the production, distribution, or consumption of the article in question.
- 3. The Department's responsibility.—The major function, performed by the Department of Commerce in the voluntary establishment of Commercial Standards on a nationwide basis is fourfold: First, to act as an unbiased coordinator to bring all interested parties together for the mutually satisfactory adjustment of trade standards; second, to supply such assistance and advice as past experience with similar programs may suggest; third, to canvass and record the extent of acceptance and adherence to the standard on the part of producers, distributors, and users; and fourth, after acceptance, to publish and promulgate the standard for the information and guidance of buyers and sellers of the commodity.
- 4. Announcement and promulgation.—When the standard has been endorsed by a satisfactory majority of production or consumption in the absence of active, valid opposition, the success of the project is announced. If, however, in the opinion of the standing committee or of the Department of Commerce, the support of any standard is inadequate, the right is reserved to withhold promulgation and publication.